

GMAO
Global Modeling & Assimilation Office

1. Global Modeling and Assimilation Office (GMAO), NASA GSFC, 2. GESTAR, 3. SSAI

- Data assimilation, which combines the information from observations and a short-range forecast, is a powerful tool to estimate the initial state of the atmosphere for NWP forecasts. Assimilating satellite observations from microwave sensors such as GPM Microwave Imager (GMI), AMSU-A, MHS, and ATMS in cloudy and precipitating regions can provide critical constraints on meteorological parameters in dynamically sensitive regions and make significant impacts on forecast accuracy for precipitation.

